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EXAMINER

HALIYUR, VENKATESH N

ART UNIT	PAPER NUMBER
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2619

MAIL DATE	DELIVERY MODE
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01/07/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/822,447

Applicant(s)

KUBLER ET AL.

Examiner

Venkatesh Haliyur

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendments filed on 12/29/2007 with respect to rejection of claims 1-42 communicated via previous office action has been considered but is insufficient to overcome Huang and Meier et al references. Rejection follows.
2. Claims 1-42 are pending in the application.

Information Disclosure Statement

3. The information disclosure statement filed on 8/23/2007 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because a valid date is not provided for citation numbers C23, C25, C26. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections – 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3,5-7,9-16,18-24,26-28,30-37,39-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang [US Pat: 5,434,856].

Regarding claims 1,15,18,22,36,39, Huang in the invention of “Method for Monitoring Communication Talkgroups” disclosed a communication network (**Figs 1-3**) operating to support voice and data communication within a premises, said communication network comprising: a plurality of mobile network devices (**items 114-116, of Fig 1**) comprising a buffer (**item 200 of Fig 2**) that stores incoming digital voice information for a predetermined queuing period before beginning voice reproduction from the stored digital voice information (**col 1, lines 58-67**); a stationary network device (**packet gateway, item 121 of Fig 1**); a wireless network (**item 111 of Fig 1**) that is used by each of said plurality of mobile network devices (**items 101-103 of Fig 1**) to selectively exchange voice and data packets with others of the plurality of mobile network devices; a hardwired network (**LAN, item 125 of**

Fig 1) connected to both said stationary network device (**packet gateway**) and said wireless network (**items 111-113 of Fig 1, col 2, lines 1-23**); said hardwired network being used to route voice and data packets between said stationary network device and said plurality of mobile network devices which participate via said wireless network (**col 1, lines 58-67**); a telephone (**consoles, item 122 of Fig 1**), connected to said stationary network device, that captures, delivers, receives and reproduces voice in an analog voice stream form (**col 2, lines 41-52**); said stationary network device comprising a buffer that stores digital voice information received from said wireless network for a predetermined queuing period before converting the stored digital voice information (**voice packets**) into an analog voice stream (**D/A, item 210 of Fig 2, col 3, lines 1-42**) and delivering the analog voice stream to said telephone (**col 2, lines 53-67**); and said stationary network device converts analog voice streams received from said telephone into voice packets for delivery via said hardwired and wireless networks to a selected one of said plurality of mobile network devices (**col 2, lines 24-40**).

Regarding claims 2-3,19,23-24,40, Huang disclosed that the predetermined queuing period is determined through examining delays found in test signal routing (**through analysis of expected voice packet**) and said stationary network device is a computer (**routers, col 2, lines 53-67**).

Regarding claim 5, 26, 32 Huang disclosed that said stationary network device provides call setup assistance for said telephone (**communication links**

established via base stations and gateway with communication units, col 2, lines 3-13).

Regarding claim 6,16,27,37, Huang disclosed a telephone switching network **(frame relay switch, item 120 of Fig 1)** connected to said stationary network device **(packet gateways and routers, item 121 of Fig 1)**; and said stationary network device selectively routes analog voice streams received from said telephone onto said telephone switching network, and said stationary network device selectively routes analog voice streams received from said telephone switching network to said telephone **(col 2, lines 4-40).**

Regarding claim 7,28, Huang disclosed a communication network located within a premises for supporting voice and data exchanges **(Figs 1-3)**, said communication network comprising: a plurality of portable terminals **(items 101-103 of Fig 1)**, each comprising a wireless transceiver; each of said plurality of portable terminals capture voice in an analog voice stream form and generate therefrom digital voice packets **(col 2, lines 3-24)**, and each of said plurality of portable terminals **(items 101-103, of Fig 1)** receive digital voice packets, generate therefrom analog voice streams, and reproduce voice from the analog voice streams **(col 3, lines 51-65)**; each of said plurality of portable terminals capture data and generate therefrom data packets, and each of said plurality of portable terminals receive data packets and reproduce data from the data packets received **(col 3, lines 3-10)**; a plurality of access devices **(base stations, items 114-116 of Fig 1)**, each comprising a wireless transceiver **(item 22 of Fig 1)**; and said plurality of access

devices using a polling protocol to manage wireless routing of data and voice packets within the premises among said plurality of portable terminals (**col 2, lines 23-40**).

Regarding claims 9,13,30,34 Huang disclosed that a telephone, connected to one of said plurality of access devices (**base stations**), that captures, delivers, receives and reproduces voice in an analog voice stream form (**col 2, lines 41-52**); said one of said plurality of access devices selectively converting digital voice packets received into an analog voice stream for delivery to said telephone for reproduction (**col 3, lines 3-11**); and said one of said plurality of access devices selectively converting an analog voice stream received from said telephone into digital voice packets for delivery to one of said plurality of portable terminals (**col 3, lines 12-65**).

Regarding claim 10, 31 Huang disclosed a telephone switching network (**frame relay switch**) connected to said one of said plurality of access devices (**base stations**); said one of said plurality of access devices selectively routes analog voice streams received from said telephone through said telephone switching network; and said one of said plurality of access devices selectively routes analog voice streams received from said telephone switching network to said telephone (**col 2, lines 23-40**).

Regarding claims 11, 14, 35, Huang disclosed that said one of said plurality of access devices provides call setup assistance for said telephone (**communication**

links established via base stations with communication units, col 2, lines 3-13).

Regarding claim 12, 33 Huang disclosed one of said access devices stores incoming digital voice packets for a queuing time period before converting the digital voice packets into an analog voice stream form (**col 2, lines 53-67**).

Regarding claims 20-21,41-42, said voice packet network comprises an Internet switching network (Frame relay over wide area network and packet networks) and wherein said second network (**item 112 of Fig 1**) device is an access device (**base station, item 115 of Fig 1, col 2, lines 3-40**).

Claim Rejections – 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 8, 17, 25, 29, 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Huang [US Pat: 5,434,856] in view of Meier et al [US Pat: 5,394,436].

Regarding claims 4,17,25,38, Huang in the invention of "Method for Monitoring Communication Talkgroups" disclosed that said wireless network utilizes

a polling protocol (**LAN protocol, col 2, lines 14-40**) but fails to disclose spanning tree routing. However, Meier et al in the invention of "Radio Frequency Local Area Network" disclosed an apparatus and method for optimal spanning tree network to control routing of data packets by the stationary network gateway device (**gateway unit, item 20 of Fig 1**) for mobile terminals (**Meier et al. col 2, lines 15-61, col 3, lines 56-65, Fig 1**).

Therefore it would have been obvious for one of the ordinary skills in the art at the time the invention was made to use the method for routing data in a radio data communication system using spanning tree routing protocol as taught by Meier et al to include in the system of Huang to utilize spanning tree routing for both data and voice packets. One is motivated as such in order to minimize the voice packet delays transmitted to and from mobile terminals via a packet gateway connected to a mobile access device by using spanning tree routing protocol method by avoiding looping of routed data packets as taught by Meier et al to cover large area with the mobile communication system.

Regarding claims 8,29, Huang disclosed plurality of access devices (**base stations, items 114-116 of Fig 1**) for routing both data and voice packets (**col 2, lines 23-40**), but fails to disclose said plurality of access devices utilize spanning tree routing for both data and voice packets. However, Meier et al disclosed an apparatus and method for optimal spanning tree network to control routing of data packets by access device (**base transceiver units, items 22,24 of Fig 1**) for mobile terminals (**Meier et al. col 2, lines 15-34, col 3, lines 40-55, Fig 1**).

Therefore it would have been obvious for one of the ordinary skills in the art at the time the invention was made to use the method of routing both voice and data packets with spanning tree routing protocol by the plurality of access devices as taught by Meier et al to include in the system of Huang to implement spanning tree routing protocol in plurality of access devices for routing both data and voice packets. One is motivated as such in order to minimize the voice packet delays transmitted to and from mobile terminals via a packet gateway connected to a mobile access device by using spanning tree routing protocol method by avoiding looping of routed data packets as taught by Meier et al to cover large area with the mobile communication system.

Response to Arguments

7. Applicant's arguments filed on 10/29/2007 have been fully considered but they are not persuasive. With regard to applicant's arguments for claims 1-42 that Huang fails to teach, suggest, or disclose, at least the following limitations, the examiner respectfully disagrees and points applicants to Huang reference as follows;

With respect to applicant's arguments that Huang fails disclose a plurality of mobile network devices comprising a buffer that stores incoming digital voice information for a predetermined queuing period before beginning voice reproduction from the stored digital voice information and each of said plurality of portable terminals capture data and generate therefrom data packets, and each of said plurality of portable

terminals receive data packets and reproduce data from the data packets received. However, Huang indeed suggests that at a plurality of network devices pertaining to each communication groups has dedicated buffers for storing voice packets (digital voice information, Figs 1-3, col 3-23) for a predetermined period of time before voice reproduction is performed in order to eliminate jitters (col 3, lines 24-42) for mobile communication units (items 101-110 of Fig 1) in talk groups (col 2, lines 41-52).

In response to applicant's argument that there is no suggestion to combine the references for claims 4, 8, 17, 25, 29, 38, the examiner recognizes that obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In this case, both Huang and Meier et al disclosed method and apparatus for receiving, buffering, reproducing and routing digital voice packets in wireless communication networks (col 2, lines 4-62, Figs 1-3, Huang). However, Huang fails to teach a spanning tree algorithm for routing voice packets but Meier et al a disclosed a method for using spanning tree routing protocol in their RF data communication system in order to route data efficiently, dynamically and without looping in wireless communication networks (col 3, lines 40-55, Fig 1, Meier et al). Therefore Huang and Meier et al references can be combined to produce the claimed invention as there is some teaching, suggestion, or motivation in the references themselves or in the knowledge generally available to one of ordinary skill in the art of wireless

communication for analog to digital and digital to analog conversion and processing voice packets.

Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616. The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached @ (571)-272-7884. Any inquiry of a general

Application/Control Number:
10/822,447
Art Unit: 2619

Page 12

nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

Venkatesh Haliyur

Patent Examiner

UH 01/02/08


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